

LISTING OF CLAIMS

1. **(cancelled)**
2. **(withdrawn from consideration but currently amended)** The system of claim 70 ~~A system according to claim 1~~, further comprising :
 - a screw associated with each cap and adapted to be inserted through a screw hole in the said cap and further adapted to be tightened to apply pressure to the said rod in order to lock the said rod relative to the said cup.
3. **(withdrawn from consideration but currently amended)** [[A]] The system according to claim 2, wherein :
 - each ~~said~~ fastener assembly is adapted to be locked with respect to its associated cup by progressive tightening of the respective cap ~~said respective~~ screw.
4. **(cancelled)**
5. **(withdrawn from consideration but currently amended)** The system of claim 70 ~~A system according to claim 4~~, wherein :
 - a ~~the~~ lower portion of the bone ~~said~~ screw head is generally hemispherical hemispherically shaped.
6. **(withdrawn from consideration but currently amended)** The system of claim 70 ~~A system according to claim 1~~, further comprising :
 - a generally, inwardly tapered conical surface formed on the interior of the said cup and surrounding the said bottom opening.
7. **(withdrawn from consideration but currently amended)** The system of claim 70 ~~A system according to claim 4~~, further comprising :
 - a generally, inwardly tapered conical surface formed on the interior of the said cup and surrounding the said bottom opening, wherein the said lower portion of the

~~bone said~~ screw head rests on ~~the said~~ conical surface in a manner in which ~~the intermediate portion is angularly adjustable said threaded shaft may be adjusted in angular orientation~~ relative to ~~the said~~ cup.

8. **(withdrawn from consideration but currently amended)** ~~[[A]]~~ The system according to claim 7, further comprising :

a seat spacer adapted to rest on top of each bone screw ~~said fastener~~ head and to be positioned beneath ~~the said~~ rod, thereby supporting ~~the said~~ rod relative to ~~the bone screw said fastener~~.

9. **(withdrawn from consideration but currently amended)** ~~[[A]]~~ The system according to claim 8, wherein :

the top surface of each bone screw ~~said fastener~~ head is generally dome-shaped and each ~~said~~ seat spacer has a complementary contact surface that contacts ~~the said~~ top surface of ~~the bone screw said respective fastener~~ head in a manner permitting angular adjustment of ~~the bone screw said respective fastener~~ relative to ~~the said~~ seat spacer.

10. **(withdrawn from consideration but currently amended)** The system of claim 70 ~~A system according to claim 1~~, further comprising :

a sleeve ring associated with each cup adapted to be positioned in ~~the said~~ cup adjacent to ~~the said~~ bottom opening and further adapted to support ~~the said~~ associated bone screw ~~fastener~~ in ~~the said~~ cup.

Claims 11-23. **(canceled)**

24. **(withdrawn from consideration but currently amended)** The method of claim 71, wherein: ~~A method according to claim 23, further comprising~~

the step of installing the cap comprises the substep of advancing a screw positioned in each cap through a screw hole in ~~the said~~ cap in a manner that locks the

rod relative to the cup ~~in which said screw is tightened against said rod to apply pressure to said rod in order to lock said rod relative to said cup.~~

Claims 25-35. **(cancelled)**

36. **(currently amended)** The system of claim 69 ~~A system according to claim 35,~~
wherein :

each said fastener assembly is arranged in the associated cup adapted to be locked with respect to ~~its associated~~ the cup by progressive tightening of the said respective screw.

37. **(currently amended)** The system of claim 69 ~~A system according to claim 34,~~
wherein :

each fastener assembly comprises:

a bone screw having a first end adapted to be driven into vertebral bone, an intermediate portion threaded for bone purchase and an enlarged head; and
a seat ring, slidably received along the intermediate portion of the bone screw,
the seat sleeve having an inside diameter that is smaller than a largest diameter of the bone screw head and an outside diameter that is larger than the diameter of the cup bottom opening ~~is a screw having a head of a diameter greater than the inner diameter of said sleeve ring, and having a threaded shaft of a diameter less than the inner diameter of said sleeve ring.~~

38. **(currently amended)** The [[A]] system according to claim 37, wherein :
the lower portion of the bone ~~said~~ screw head is generally hemispherical
hemispherically shaped.

39. **(currently amended)** The system of claim 69 ~~A system according to claim 34,~~
further comprising :

a generally, inwardly tapered conical surface formed on the interior of the said cup and surrounding the said bottom opening.

40. **(currently amended)** ~~[[A]]~~ The system according to claim 38, further comprising:
a generally, inwardly tapered conical surface formed on the interior of the said
cup and surrounding the said bottom opening,
wherein the seat ~~said sleeve~~ ring rests on the said conical surface and the said
lower portion of the bone ~~said~~ screw head rests on the seat ~~said sleeve~~ ring in a manner
in which the intermediate portion of the said threaded shaft is angularly adjustable ~~may~~
~~be adjusted in angular orientation~~ relative to the said cup.
41. **(currently amended)** ~~[[A]]~~ The system according to claim 40, further comprising:
a seat spacer adapted to rest on top of each the bone screw ~~said fastener~~ head
and to be positioned beneath the said rod, thereby supporting the said rod relative to
the bone screw ~~said fastener~~.
42. **(currently amended)** ~~[[A]]~~ The system according to claim 41, wherein:
the top surface of each bone screw ~~said fastener~~ head is generally dome-shaped
and each ~~said~~ seat spacer has a complementary contact surface that contacts the said
top surface of ~~said~~ the respective bone screw ~~fastener~~ head in a manner permitting
angular adjustment of the said respective bone screw ~~fastener~~ relative to the said seat
spacer.

Claims 43-67. **(cancelled)**

68. **(new)** A spinal rod system for bridging one or more adjacent vertebrae, the
system comprising:
a first and a second fastener assembly, each having a first end adapted to be
driven into vertebral bone, an intermediate portion threaded for bone purchase and a
second end with an enlarged head;
a first and a second rod retention assembly, each rod retention assembly
comprising a cup with an open top end and an open bottom end, the bottom end of
each rod retention assembly providing a generally circular opening that is larger than

the intermediate portion of the fastener assembly and is smaller than the enlarged head of the fastener assembly, the open top end of each cup comprising a top opening defined by a generally cylindrical wall which comprises two diametrically opposed slots that extend downwardly from the uppermost portion of the generally cylindrical wall, the generally cylindrical wall further comprising an interior cylindrical wall surface with at least two inverted shoulders, each inverted shoulder having a contact surface that inclines radially outwardly from a center axis of the cup;;

a rod extending at least between the respective rod retention assemblies; and

a cap associated with each cup, each cap being generally cylindrical and having at least two shoulders that extend radially outward a center of the cap, a contact surface on each shoulder that is inclined upwardly in a radially outward direction; and

wherein the rod is received in the diametrically opposed slots in each rod retention assembly and retained therein by the cap, which is positioned in the cup above the rod such that the respective contact surfaces of the cup and the cap contact each other.

69. **(new)** The spinal rod system of claim 68, wherein:

at least one of the fastener assemblies comprises:

a bone screw having a first end adapted to be driven into vertebral bone, an intermediate portion threaded for bone purchase and an enlarged head; and

a seat ring, slidably received along the intermediate portion of the bone screw, the seat sleeve having an inside diameter that is smaller than a largest diameter of the bone screw head and an outside diameter that is larger than the diameter of the cup bottom opening.

70. **(new)** The spinal rod system of claim 68, wherein:

at least one of the fastener assemblies comprises:

a bone screw having a first end adapted to be driven into vertebral bone, an intermediate portion threaded for bone purchase and an enlarged head with a largest diameter that is larger than the diameter of the cup bottom opening.

71. **(new)** A method of bridging a pair of adjacent vertebrae in a stabilizing manner, comprising the steps of:

providing an unassembled spinal rod retention system of claim 68;

Inserting the first and second fastener assemblies into the respective first and second rod retention cups;

installing the intermediate portions of the respective fastener assemblies into the adjacent vertebrae, one fastener assembly in each vertebra;

positioning the rod into the diametrically opposed slots of each of the rod retention assemblies so that the rod extends at least between the respective cups; and

installing a cap into each rod retention assembly atop the rod and tightening the cap such that a portion of the rod inside the cup is retained therein and the tightening locks angular orientation of the fastener assembly relative to the rod retention assembly.

72. **(new)** The method claim 71, wherein:

the step of inserting the fastener assemblies into the respective rod retention assemblies comprises the substeps of:

inserting a seat ring into each of the rod retention cups, and

inserting a bone screw into each of the rod retention cups and through a central opening in the seat ring, such that intermediate portion of each bone screw extends outwardly from the rod retention cup and the seat ring, interposed between the head of the bone screw and the bottom opening of the rod retention cup, retains the bone screw in the rod retention cup in a angularly adjustable manner.